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ABSTRACT

This document presents two budget exercises for educational administrators to provide means for the improvement of management and planning efforts in higher education institutions. The examples, Principal College and Major University, are fictional institutions, but their statistical data and problems will be easily recognizable as being close to those of many colleges and universities in the United States. Principal College, representing a small liberal arts college, and Major University, representing a large research university both have serious financial problems. The problem for the president of both institutions is to reduce the expenditures authorized for the coming year along with the related auxiliary problems associated with cutbacks. The author presents objectives and programs, financial statistics, instructional procedures, expenditure analysis, admissions policies, research enrollment, and governance of each institution. The solution of each institution's problems is left with the reader. (PG)

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Management Division
Academy for Educational Development,
October, 1973

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Two Budget Exercises

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Academy for Educational Development, Inc.
October, 1973

PREFACE

The two budget exercises appearing herein, The Case of Principal College and The Case of Major University, were originally written by Dr. John D. Millett, Vice President and Director of the Management Division, Academy for Educational Development, for the purpose of initiating small group discussions among college and university presidents. Through a series of meetings and seminars, the Management Division perceived that the enthusiastic reaction to this case study approach warranted distributing the exercises more widely. Moreover, these exercises are a product of a continuing Management Division commitment to providing various means for the improvement of management and planning efforts in higher education institutions.

Principal College and Major University are, of course, fictional institutions. Their statistical data and their problems, however, will be easily recognizable as being close to those of many colleges and universities in this country.

PART I

THE CASE OF PRINCIPAL COLLEGE

A Budget Exercise for Presidents of Liberal Arts Colleges

PRINCIPAL COLLEGE

Miscellaneous Data
1971-72

Enrollment	1,930
Faculty (FTE)	134
Principal Administrative Officers	10
Library Staff (professional)	5
Student Services Staff (professional)	16
Operating Staff (instructional)	50
Operating Staff (auxiliary)	75
Campus Acreage	75
Number of Buildings	23
Student Housing Capacity	1,300
Market Value of Endowment	$5,000,000
Accumulated Reserve	$ 460,000

THE FINANCIAL STATUS OF PRINCIPAL COLLEGE

Background

Principal College is a non-sectarian, independent liberal arts college located in a city with a population of 25,000, in the east north central region of the United States. The college, which is 130 years old, has a distinguished reputation. Many of its graduates have had impressive careers in various professions.

Principal College has experienced several years of financial difficulty. It has been unable to balance its current income and expense since 1969-70. The deficit for each year has been met from funds functioning as endowment and from utilization of proceeds from an ongoing capital gifts program launched in 1968.

Board of Trustees. The board of trustees is made up of thirty-three persons plus the president of the college. Nine of the trustees are elected by the alumni association, three each year for three-year terms. The board itself elects twenty-four trustees, four each year for six-year terms. Trustees may succeed themselves. Actually, twenty-one members are alumni or alumnae of the college. The board includes four women, and the members generally have been recruited from the professions and business. Two of the trustees, one of whom was selected by the board itself, are faculty members of two well-known universities. There are no faculty members or students of Principal College on the board, although a faculty liaison committee and a student liaison committee of five persons each have been invited to meet informally with the trustees. The board meets in full session twice a year, once in January and once in June. In addition, an executive committee of nine meets every month from October through December and from February through May.

The board has been very much concerned about the financial situation of Principal College and had informed the president that the budget projections for 1973-74 were not acceptable. Although the board approved in June 1972, a budget for the academic year 1972-73, with a projected deficit of $185,000, the president was

then advised that the expenses should be reduced during the year and the deficit substantially cut.

The Goals and Objectives of the College

Goals. Principal College declares that its basic goals are to provide to its students through an undergraduate baccalaureate education an understanding and appreciation of the intellectual and cultural heritage of man, to cultivate in its students a love of the beautiful and the good, and to prepare its graduates to live in society with happiness for themselves and with helpfulness for others.

In turn, these goals have been subdivided into several somewhat more specific objectives:

1. To acquaint all students with the roles of language and of mathematics as the symbols of intellectual communication and discourse.
2. To develop in all students a synoptic understanding of the condition and the concerns of man as they are presented through literature, history, and philosophy.
3. To offer all students the practical and empirical knowledge of the various disciplines upon which may be built a professional or civic career of service to others.
4. To encourage all students to explore concepts of esthetic and ethical knowledge in order to develop for themselves standards of value by which to determine those objects and those manifestations of behavior which are beautiful, good, and right.

Policies. In pursuit of these basic goals and objectives, Principal College has formally adopted certain fundamental policies. These include:

a. Restricting its curriculum offerings primarily to the baccalaureate level and to the arts and sciences.
b. Limiting its enrollment size to a maximum of 2,500 undergraduate students.
c. Accepting students on a selective basis with primary attention to a student's potential for intellectual and cultural achievement consistent with the objectives of the college.
d. Ensuring equal access to the college of all applicants of comparable academic potential regardless of socio-economic status, sex, race or ethnic characteristics, or religion.
e. Encouraging student responsibility for individual and group behavior subject to the legal standards of society and to the social commitments of freedom, tolerance, and respect for the rights of all persons as individuals.

f. Maintaining academic freedom within the college.
g. Attracting and retaining a competent faculty loyal to the goals, objectives, and policies of the college and selected without discrimination based upon sex, race, religion, or national origin.
h. Providing the best possible facilities for educational service, including the housing of students in an environment contributing to the achievement of the college's goals and objectives.
i. Ensuring governance of the college with a proper concern for the points of view of faculty and students.
j. Operating all services, instructional and other, economically and efficiently.

Primary Programs

Principal College has undertaken the following programs as means of carrying out its stated goals and objectives:

1. **Instruction**
   a. **Undergraduate Arts and Sciences**
   b. **Music**
   c. **Nursing**
   d. **Graduate Programs in Chemistry and Teacher Education**
2. **Student Aid (About 20 percent of entering freshman have been provided financial assistance)**

Music. Although dedicated to undergraduate instruction in the arts and sciences, Principal College has maintained a school of music for over eighty years. Ten faculty members are in the school, and the total enrollment in 1971-72 was one hundred students, of whom seventy-five were women and twenty-five were men. The student-faculty ratio in music is ten to one; the overall ratio for the college is fourteen to one. Although the school of music is recognized as a high cost area of instruction, the college has justified its inclusion of a professional program of music on two grounds. First, the school has contributed to the general cultural purpose of the college through its musical recitals and group performances. Many non-music students have enrolled in the college symphony orchestra, the college choir, and the college chorus. Public performance has helped to cultivate an esthetic appreciation of the role and scope of musical expression. In addition, the college for many years has been concerned about the limited number of women students it has enrolled, and the school of music has always attracted women students.

Nursing. Further, in response to a request from two community hospitals in a metropolitan area forty miles away, Principal College established a school of nursing in 1958. In 1971-72, the total enrollment in this program was fifty women students. The faculty is comprised of seven persons. Students in nursing spend two years on the campus and two years in clinical education at the two community hospitals. The major part of the nursing staff lives near the two hospitals.

Chemistry. Another program at Principal College was established because a major chemical manufacturing company had located an important plant some ten miles from the campus. The college therefore undertook a master's degree program in chemistry, beginning in 1966. The program enrolled ten full-time equivalent students as of 1971-72 and was expected to remain stable at about that level of enrollment for the near future. The chemistry department numbers seven faculty members, of whom three are full professors. The graduate program, supported also by the mathematics department, is carried as a part of the regular instructional load of the department and does not seem to cost more than what the cost is to instruct senior majors in the department.

Education. The other graduate program of the college is a master's program in education. Several school districts in the area surrounding the college location had urged the college to provide courses for their teachers in order to enable them to earn a master's degree. The college had responded by offering fifteen courses at the master's degree level. In addition, various departments offered instruction which provided graduate credit for teachers. The graduate enrollment of teachers fluctuates on a full-time equivalent basis around twenty-five students.

Supporting Programs

In order to carry out its primary programs, Principal College necessarily has undertaken several supporting programs. The major support programs are as follows:

1. **Library**
2. **Student Services**
   a. Admissions
   b. Registration and Records
   c. Counseling
   d. Health Service

Principal College
Basic Data - 1
Enrollment

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
Undergraduate					
Liberal Arts	1790	1765	1750	1765	1785
Music	105	105	100	100	100
Nursing	55	55	50	60	65
Men	1170	1165	1150	1165	1170
Women	780	760	750	760	780
Freshmen	640	620	600	625	630
Sophomores	540	530	525	500	500
Juniors	400	395	400	425	420
Seniors	370	380	375	375	400
Full-Time	1920	1900	1880	1905	1930
Part-Time	30	25	20	20	20
TOTAL	1950	1925	1900	1925	1950
Graduate (FTE)					
Education	25	22	20	25	30
Chemistry	5	8	10	10	10
GRAND TOTAL	1980	1955	1930	1960	1990

3. **Institutional Support**
   a. Plant Operations
   b. Logistical Operations
   c. Financial Operations
   d. Development
   e. Executive Management
4. **Auxiliary Services**
   a. Housing for 1,300 Students (900 men and 400 women)
   b. Bookstore

Recruitment. Principal College has experienced considerable difficulty in recruiting the students it desires to enroll. Total enrollment declined from 1969 to 1971, and a small increase was anticipated in 1972. The number of applications declined during these same years, as did the number of freshmen who enrolled after having been admitted. The quality of the entering class as indicated by SAT scores was dropping. It was becoming increasingly difficult to recruit and enroll the number of students who could meet both the academic ability and the student charges desired by the college.

The constitutency of Principal College consists of certain high school students in the state where the college is located who are interested in attending a small liberal arts college. Fifty to sixty percent of new students were *not* being recruited from the Chicago and the New York metropolitan areas, especially from New Jersey. It was becoming increasingly difficult to recruit eastern students.

The college responded by intensifying its efforts at student recruitment. The admissions office is staffed with three full-time persons and others, faculty and students, were asked to assist on a voluntary basis. increased funds were spent on promotional literature and upon travel. From fifty to sixty percent of new students were being recruited from outside the state in which Principal College is located. This recruitment effort cost the college more money. The college could enroll more students, the admissions office claimed, if more student financial aid were available. As it was, in 1972-73, the college was committed to spending nearly $600,000 more for student aid than was available from income designated for student financial assistance. The college had a good record in the proportion of those admitted who actually enrolled; the admissions program endeavored to make sure that those admitted had a very real interest in attending.

Principal College
Basic Data - 2
Admissions

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
Applications	1500	1400	1300	1300	1300
Admitted	850	850	850	850	850
Enrolled	640	620	600	625	630
SAT Verbal Score above 500					
Applications	1000	900	800	800	800
Admissions	800	800	800	800	800
Enrolled	600	550	500	500	500
Family Income of Enrollments					
Under $15,000	150	140	125	125	125
Above $15,000	490	480	475	500	505
Student Aid (Freshmen)					
Number	128	124	120	125	126
Average Grant	1500	1600	2000	2100	2150
Annual Charges					
Tuition	1800	1950	2100	2250	2400
Room and Board	1000	1050	1100	1200	1250
TOTAL	$2800	$3000	$3200	$3450	$3650

Development. Principal College was also engaged in a major fund-raising drive. The development office was an important item of administrative overhead, but endowment had been advancing very slowly in recent years. Annual giving, although it had fallen off since 1969, had been maintained at a sizeable level. The college had added substantially to its physical facilities between 1960 and 1970. Both the board of trustees and the president were convinced that without the support of its fund-raising effort, the college would long since have ceased to exist.

Student Services. The student counseling activity had expanded on campus during recent years. Indeed, the student services staff engaged in counseling and in student health was badly overworked. A good deal of time had been devoted in an effort to convince students that intellectual activity was relevant to their immediate concerns, that the college should and could remain neutral in the political-social conflicts of the day, and that alumni and other support of the college was important to their own welfare. The one doctor and three nurses of the health service were overburdened with drug abuse and sexual problems on campus. In addition, some students were asking for college involvement in and expenditure for health and other services to the community where the college was located.

Computer Services. In 1963, the college had established a computer service to meet administrative and instructional needs for electronic data processing. Although, by 1972, the college was convinced of the utility of such data processing, there continued to be questions as to whether or not a computer service was necessary as a supportive adjunct of the instructional process.

In general, it is reasonable to say that Principal College confronted all the major dilemmas of the independent, selective liberal arts college of 1972-73.

THE PROBLEM

You are the president of Principal College. You have instructions from the board of trustees to reduce the expenditures authorized for 1972-73 and to change the budget projections for 1973-74 so that the board can adopt a balanced budget in June, 1973. It is your problem to analyze college objectives, policies, programs, and budget. It is your problem to determine the alternative lines of

action to be given consideration. It is your problem to set up the consultative arrangements whereby faculty, students, and support staff may be involved in discussion of the financial crisis confronting the college.

The Approach: Objectives and Programs

Insofar as the objectives, policies, and programs of the college are concerned, there are at least three major issues to be considered:

(1) **Should Principal College remain a selective liberal arts college?**

(2) **Should Principal College curtail or modify any of its instructional and support programs?**

(3) **Should Principal College reduce its student aid program in order that the costs are offset by the income earmarked for this purpose?**

How much does the college need to know about the distribution of scholastic aptitude in the high school population of the nation? Should the college know that about twelve percent of all high school graduates taking the Scholastic Aptitude Test scores above 500 on the verbal part of the test, and that the total number in this category would be around 360,000 high school graduates? How much does the college need to know about the distribution of high school graduates by scholastic ability and *family income status? Should the college know that 150,000 high school graduates scoring 500 or above on the verbal section of the SAT come from families with incomes above $16,000 a year – an income level where the family might contribute $3,000 a year toward the college expenses of a student? Should the college know that about 120,000 high school students scoring above 500 on the verbal SAT will come from families with incomes above $20,000 a year – an income level where the family might contribute $4,000 or more toward the college expenses of a student? Should the college know that at the score of 400 on the verbal SAT there will be close to 350,000 total high school graduates from families with incomes above $16,000 a year? If the top fifty percent of high school graduates were eligible for admission, as many as 450,000 might fall within the family income range of $16,000 a year and above.*

How much does the college need to know about its instructional program? Certain information is, of course, easily ascertainable, such as the fact that in the autumn of 1972, the college will offer some three hundred undergraduate courses and over thirty graduate

Principal College
Basic Data – 3
Staffing

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
Faculty (FTE)					
Professors	36	36	35	36	36
Assoc. Prof.	37	35	34	34	34
Ass't. Prof.	50	49	50	50	50
Instructor	11	11	10	10	10
Other	6	6	5	5	5
	140	137	134	135	135
Workload					
Student/Faculty Ratio	14.2	14.3	14.4	14.5	14.7
Median Course Hours	12.8	12.4	12.0	12.0	12.0
Average Class Size	16.5	17.0	18.0	18.1	18.2
Compensation					
Average Salary	$ 12,500	$ 13,000	$ 13,600	$ 13,600	$ 14,200
Fringe Benefits	1,050	1,130	1,550	1,550	1,630
Annual Increase in Salary	8%	3.2%	5.3%	-0-	4.9%
Annual Increase in Benefits	1.8%	8%	38.6%	-0-	4.3%
% Benefits to Salary	8.4%	8.7%	11.4%	11.4%	11.5%
Compensation Cost	$1,897,000	$1,935,810	$2,030,100	$2,035,250	$2,137,050

courses. The 134 faculty members with regular appointments (not including administrators doing part-time instruction) are divided among twenty-one departments, including a department of education, a department of music, and a department of nursing. The student-faculty ratio, the average class size, the average teaching load of the faculty in terms of student credit units — these are data readily available.

What does the college need to know about the relationship of the curriculum to its objectives? What does the college need to know about the relationship of the curriculum to the interests and needs of students? How does the college determine the effectiveness of the curriculum in achieving its stated educational objectives?

What does the college need to know about its student aid program? Should it be a college objective to equalize in some part to some extent the economic barriers which may block access to this particular college? Should this objective be of higher priority than faculty salaries, an adequate library, a successful development program, or a student counseling and health program?

Other Financial Circumstances

On June 30, 1972, Principal College had total assets of around twenty-two million dollars, of which fifteen million dollars represented the book value of land, buildings, and equipment. The bonded indebtedness for residence facilities at that time amounted to four million dollars. Assets had increased by about 1.5 million dollars in the two years preceding 1971-72, represented primarily by plant funds. Bonded indebtedness had increased only $200,000 over a two year period. There had been an increase also in the National Defense Student Loan Fund.

Since the College operated on the basis of 4.2 million dollars in instructional income and a total budget of around 6.2 million dollars, average monthly expenditures were nearly $500,000. Without prepaid tuition and other fees, the college would have had a severe cash flow problem; because of limited summer session outgo and student payment of complete tuition charges for one semester in September, the college was just barely able to avoid any borrowing for current expense. There was a surplus account of $460,000 which could also serve as working capital. This surplus, however, had been reduced through operating deficits during three years.

Instructional Staffing: 1971-72

Departments	Total	Prof.	Assoc. Prof.	Ass't. Prof.	Instr.	Other
Art	4	1	1	2		
Biology	6	2	2	2		
Chemistry	7	3	3		1	
Dramatic Arts	3	1	1	1		
Economics & Bus. Admin.	7	2	2	3		
Education	5	2	1	2		
English & Journalism	12	3	5	2	2	
Geology	6	1	1	2	2	
History	6	2	2	2		
Mathematics	10	1	3	5	1	
Modern Languages	9	2	1	3	1	2
Music	10	2	1	7		
Nursing	7	2	2	1		2
Philosophy	3		1	2		
Physical Education	11	2	2	6		1
Physics	5	2	1	2		
Political Science	4	1		3		
Psychology	5	2		3		
Religion	2	1	1			
Sociology	3	1	1	1		
Speech	9	2	3	1	3	
	134	35	34	50	10	5

Course Offerings

Departments	General Education	Baccalaureate	Graduate
Art	1	13	
Biology	1	12	1
Chemistry	1	13	6
Dramatic Arts		7	1
Economics and Business Administration	1	28	1
Education		9	6
English and Journalism	1	20	3
Geology		20	2
History	1	18	2
Mathematics		18	4
Modern Languages		27	
Music		20	
Nursing		6	
Philosophy	1	9	
Physical Education	1	12	2
Physics		13	2
Political Science		12	
Psychology	1	9	1
Religion	1	8	
Sociology	1	10	1
Speech		12	2
	11	296	34

Principal College
Consolidated Balance Sheet
June 30, 1972

Assets	
Cash	$ 175,000
Accounts Receivable	55,000
Bookstore Inventory	40,000
Securities	4,800,000
Investments	500,000
Debt Reserve	500,000
Student Loans	1,000,000
Land, Buildings, and Equipment	15,000,000
	$22,070,000
Liabilities	
Accounts Payable	—0—
Notes Payable	400,000
Accrued Salaries	180,000
Accrued Taxes	40,000
Prepaid Deposits	175,000
Agency Funds	15,000
Bonded Indebtedness, Residence Facilities	4,000,000
National Defense Student Loan	1,000,000
Endowment	4,800,000
Plant Fund	11,000,000
Surplus	460,000
	$22,070,000

The Approach: Instructional Process

The expense of departmental instruction at Principal College constitutes approximately fifty-five percent of the educational and general budget. All but $160,000 of that expense is committed to faculty compensation: salaries and fringe benefits. The college would like to spend more for supplies, equipment, travel, and secretarial assistance. The average faculty compensation for 1972-73 is projected to be $15,150, which would rank the college at about the sixtieth percentile for liberal arts colleges on the AAUP rating scales. Faculty salaries were not to be increased in 1972-73 because of a substantial increase in fringe benefits provided by the college in 1970 and 1971. Should salaries be frozen at the college for another year in an effort to fall back toward the fiftieth percentile in AAUP compensation ratings?

Should the college consider elimination of any programs? Should the graduate program in chemistry be eliminated? Should the graduate program for teachers be eliminated? Should the undergraduate program in music be phased out? Should the undergraduate program in nursing be eliminated or transferred to other auspices? Should intercollegiate athletics now supported in the budget for the physical education department be eliminated? There are eleven faculty positions in physical education; on the other hand, intercollegiate athletic activities produce a considerable part of the "other" income of the college, and the elimination of athletics will also mean a reduction of nearly $65,000 a year in income.

Should the curriculum be substantially reduced from around three hundred to under two hundred courses? Should the teaching load in terms of student credit units and average class size be increased? Should the college know that with a student-faculty ratio of eighteen to one the number of faculty positions could be reduced from 134 to 107? Should the college know that with a student-faculty ratio of twenty-one to one the number of faculty positions could be reduced to ninety-two?

Approach: Expenditure Analysis

As you, the president, examine the expenditure pattern for Principal College, certain obvious facts become immediately apparent. First, the auxiliary services budget has been producing a consistent surplus of about $100,000 a year from room, board, and bookstore operations. Costs have risen, but charges have also been increased. Although there is a good deal of student dissatisfaction

Departmental Enrollment and Expenditures
1971-72

	FTE Enrollment	Faculty Cost	Other Costs	Overhead Allocation	Expenditure Per Student
Art	70	$ 61,000	$ 4,800	$ 70,000	$1,940
Biology	90	100,000	7,200	87,500	2,163
Chemistry	115	120,000	8,400	104,000	2,021
Dramatic Arts	35	45,000	3,600	35,000	2,389
Economics & Business Administration	135	110,000	8,400	122,000	1,781
Education	115	75,000	6,400	102,500	1,599
English & Journalism	195	180,000	14,000	174,000	1,887
Geology	55	90,000	7,200	52,500	2,722
History	160	90,000	7,200	140,000	1,483
Mathematics	115	155,000	12,000	105,000	2,365
Modern Languages	135	130,000	10,500	122,500	1,948
Music	30	134,000	12,000	35,000	6,033
Nursing	40	115,000	8,400	35,000	3,960
Philosophy	35	36,000	3,600	35,000	2,131
Physical Education	40	150,000	13,000	35,000	4,950
Physics	60	85,000	6,000	52,500	2,392
Political Science	120	60,000	4,800	105,000	1,415
Psychology	160	80,000	6,000	140,000	1,413
Religion	20	30,000	2,500	17,500	2,500
Sociology	90	45,000	3,600	87,500	1,512
Speech	115	135,000	10,000	102,500	2,152
TOTAL	1,930	$2,026,000	$159,600	$1,760,000	
Average					$2,044

Principal College

Basic Data – 4

Income and Expenditures

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
INCOME					
Instruction and General	$3,480,000	$3,860,000	$4,200,000	$4,500,000	$4,750,000
Student Fees	3,135,000	3,555,000	3,800,000	3,975,000	4,100,000
Endowment	120,000	115,000	200,000	250,000	300,000
Gifts	55,000	50,000	100,000	150,000	200,000
Other	170,000	140,000	100,000	125,000	150,000
Auxiliary Services	$1,300,000	$1,470,000	$1,500,000	$1,560,000	$1,600,000
Student Aid	$ 160,000	$ 230,000	$ 325,000	$ 325,000	$ 360,000
Federal	100,000	110,000	100,000	105,000	120,000
State	-0-	50,000	150,000	140,000	150,000
Endowment & Gifts	60,000	70,000	75,000	80,000	90,000
TOTAL	$4,940,000	$5,560,000	$6,025,000	$6,385,000	$6,710,000
EXPENDITURES					
Instructional and General	$3,300,000	$3,700,000	$3,955,000	$4,200,000	$4,510,000
Instruction	1,855,000	2,060,000	2,190,000	2,355,000	2,580,000
Library	200,000	250,000	220,000	230,000	240,000
Student Services	360,000	400,000	440,000	460,000	480,000
Plant Operation	335,000	350,000	400,000	430,000	460,000
Administration and General	550,000	640,000	705,000	725,000	750,000
Auxiliary Services	$1,200,000	$1,300,000	$1,400,000	$1,450,000	$1,500,000
Student Aid	$ 650,000	$ 710,000	$ 860,000	$ 920,000	$ 950,000
TOTAL	$5,150,000	$5,710,000	$6,215,000	$6,570,000	$6,960,000

with the requirement that men and women students reside within college housing, at least for the first two years, there is no immediate financial concern with the auxiliary services budget.

Secondly, expenditures for student aid have consistently exceeded income earmarked for this purpose. The college would have a surplus instead of a deficit if only the earmarked income were expended for student aid purposes. This cost, however, is closely related to one of the important policy positions of the college. Should this policy position be modified?

In the third place, it is clearly evident that the largest outlay of the college is its budget for educational and general purposes. In this case, income exceeded expenditures by about $250,000 in 1971-72. Should these expenditures then be ignored or considered satisfactory?

It is found that the distribution of educational and general expenditures is approximately as follows:

Instruction	55%
Library	6%
Student Services	11%
Plant Operation	10%
Administration and General Expense	18%

Should the college be spending as much as eighteen percent for administration and general expense? Is $705,000 for this activity unreasonably high? Obviously, these questions are meaningless without more information. Upon analysis, it is found that the various endeavors included in this general support program for 1971-72 were as follows:

President's Office (including board expense)	$ 75,000
Development Office	125,000
Dean's Office	80,000
Treasurer's Office	130,000
Publications	40,000
Computer Center	80,000
Telephone Service	45,000
Mail Service	15,000
Reproduction Service	15,000
Convocations	10,000

Lectures and Artists	35,000
Institutional Memberships	10,000
Central Stores Service	20,000
Athletics	25,000
	$705,000

Although it was projected that these various activities would increase somewhat for 1973 and for 1974, it may be possible that some economies might be realized in this support program. The problem then is to determine where to start and how much reduction might be accomplished without impairing the objectives or the operations of the college.

An expenditure of $400,000 for plant operation appears to be low and questions are raised as to whether or not the college has neglected maintenance of the physical facilities. It is true that the college has added substantially to its plant in recent years and that maintenance expenses are relatively low in these first years of operation. It might be appropriate to accumulate some plant surplus at the present time in anticipation of higher levels of maintenance expense in future years. There is also some question as to whether or not the college may be neglecting adequate security of the physical plant; it has avoided any additional outlay for this purpose by relying upon local police assistance and four night watchmen.

The student services costs have been increasing year by year. The admissions operation has cost around $100,000 a year; registration, about $100,000; the financial aid office, around $60,000; the student health service, approximately $50,000 a year; academic advising, around $30,000; and general advising, about $90,000. The placement office has cost only around $10,000 a year. Students have been requesting an expansion in the student health service, and the college is concerned whether the expenditures for placement activity may or may not be too low.

Finally, there is the question of whether or not library costs are unduly high. The hours of library service were extended from seventy-two to eighty hours a week in 1970, and some students expressed their opinion that library hours should be further extended to ninety-two hours a week. The librarian points out that book costs have risen one-hundred percent in ten years and that faculty members are requesting more and more books and other reference materials in connection with their course offerings.

Income

In addition to the expenditure half of the college budget, it is also essential for the president to examine the income half. The distribution of $4,500,000 of educational and general income projected for 1972-73 is as follows:

Student Fees	88%
Endowment	6%
Gifts	3%
Other	3%

Would it be possible to increase these items of income by any appreciable extent? One possibility, of course, would be to increase student fees toward the $3,000 level. This course of action is feasible only in terms of a market survey of demand for enrollment at Principal College and an assessment of the impact of such action upon the educational objectives of the college. Would an increase in student charges mean a net reduction in enrollment? Would an increase in student charges mean a net reduction in the quality of students admitted? Should an increase in student charges be accompanied by an increase in the college contribution to the student assistance budget? What are the prospects that society through government will provide a larger share of the student assistance budget? Could loan funds be utilized in order to help finance increased charges to students? These and similar issues are readily apparent as vital questions to be considered in arriving at a decision about the desirable level of student charges for Principal College.

The actual income return on the college's endowment was projected at five percent. Endowment management in recent years has stressed security and cash return. The management of the endowment was handled by the treasurer under policies determined by an investment committee of the board of trustees. The treasurer retained professional investment counsel in the actual sale and purchase of securities. Should the college shift its emphasis from security and income return? Would the college fare better in investment management if the entire endowment fund were turned over to a professional investment company for management?

The gift income record of Principal College has been fairly successful, with as much as $150,000 raised for current operations and student aid in recent years. A very considerable part of the

workload of the president, the vice president for development, and the development staff was devoted to fund raising. Moreover, the twin targets of an expensive publications activity were student recruitment and gift cultivation. The administrative staff and the trustees seriously doubted whether or not the gift program could be expanded to any sizeable extent without a much greater outlay for solicitation, and even then, they suspected that very marginal dollar spent on solicitation would yield a declining return. Gift income in 1971-72 had been distributed as follows:

Alumni	$100,000
Trustees	20,000
Community and Others	30,000

A substantial increase in gift income was projected for 1972-73.

Other income was obtained from a variety of sources: admission charges to lectures, performances, and athletic events; the rental of facilities; and miscellaneous receipts. This income was fairly stable, and charges had not been increased in recent years in the fear that higher prices would result in a decline of income.

Finally, there were questions about whether or not a larger surplus might be realized each year from the room, board, and bookstore operations. This surplus used for support of general expense (actually for student aid) had remained constant and might possibly be increased. It was pointed out that students are the clientele primarily paying these charges, and that if charges were to be increased it would be preferable procedure for the college to do this directly rather than indirectly. Moreover, the dean of students pointed out that there was already some difficulty with student groups about the current charges for these services and that an increase in these charges could only result in increased argument about housing practices and bookstore operations.

Assumptions

In any projection of future events, including projections of a college budget, certain assumptions, implicit or explicit, must necessarily be accepted. In an analysis of the future budget of Principal College, one may consent to certain major assumptions, as follows:

1. Although the international affairs of the United States will continue to be characterized by various tensions, the military involvement in overseas operations is expected to diminish, and military manpower will be recruited on a voluntary basis by 1973-74.

2. The economy will continue to advance from the recession of 1969-70, with Gross National Product advancing at an average of from three to four percent per year in real terms in 1973, 1974, and 1975.

3. The cost of living will continue to rise, but at a rate not much, if any, above three percent per year as measured by the Consumer Price Index.

4. Median family income, which was $10,285 in 1971, will continue to rise in 1973, 1974, and 1975, both in real terms and in dollars of current purchasing power.

5. Manpower demands will be especially intense for persons in the health service occupations (including nursing), in business management (especially accounting, market research, and personnel work), in employment counseling and in rehabilitation counseling, in applied mathematics, in the life sciences, in the physical sciences, and in certain other fields, such as home economics, library science, environmental science, computer programming, social services, systems analysis, and recreation work.

6. An oversupply of school teachers and higher education instructors will continue to prevail, at least through 1975.

7. The public sector of higher education will continue to expand, but the growth will occur primarily at the two-year campuses.

8. The state governments will be more concerned than they were in the 1960's in their planning and coordinating endeavors to assist the operating viability of private colleges. State funds to support college operation will not be available directly, but some lessening of price competition is to be expected.

9. Federal government interest in providing assistance to students will be directed primarily toward financial assistance to students, and this effort is likely to increase the number of applicants from lower levels of family income and from lower levels of SAT scores.

10. The future of instructional productivity, of collective bargaining by faculty, and of faculty salary increases other than cost of living adjustments is quite uncertain.

11. There will continue to be opportunities for obtaining gift income, provided that tax reform legislation in 1973 does not reduce the tax incentives for such giving.

12. The costs of college operation will tend to increase by more than the cost of living because of various pressures for additional services and improved instruction exerted by students.

Issues

As the president proceeds to consider the budget task which he confronts, he is aware that he needs to develop strategies in two somewhat different areas of concern. First, he needs a strategy for the achievement of consensus within Principal College about the most acceptable line of action for balancing the operating budget. Secondly, he needs a strategy of action which will, in fact, produce a balanced budget for the college.

It is obvious that the procedure for achieving consensus will have much to do with the development of a balanced budget. The college community must be involved in the discussion of the budget situation if any particular strategy of action is to be acceptable; that is, if it can be accepted with a minimum amount of dissent and without disruption. At the same time, the development of the most appropriate procedure for achieving some degree of college consensus raises a number of particular questions. These include:

1. *Should the college review its budget situation as a single community or as constituent groups of a community (faculty, students, administration, staff, alumni)?*

2. *Would it be desirable to involve the academic community as a whole in discussion of budget problems? If discussions are to be carried on by the college community as a whole, should the community be asked to elect representatives for this particular purpose? To what extent should the facts of the situation be communicated to the entire community in advance of the selection of a representative structure? Should representatives be selected by constituencies (faculty, students, administrators, staff, alumni) or as a whole? What should be the basis of the numbers involved?*

3. *Would it be preferable to carry on discussions constituency*

by constituency rather than as a whole academic community? Would it be desirable to utilize existing mechanisms for this purpose (such as the faculty council, the student council, the administrative council, the alumni council) or would it be desirable to undertake the discussion of budget problems on an ad hoc *basis? If* ad hoc *bodies are to be utilized, how should these be selected?*

4. *How should the support staff, that is, the non-academic staff, be involved in the budget discussion?*

Insofar as a strategy of action is concerned, it is obvious that the college must find answers to two basic questions: (1) *can income be increased* in such amounts as may be needed to close the gap between current income and current expenditures, and (2) *can expenditures be reduced* in such a way as to maintain the college's objectives and still operate effectively?

The primary expenditure problem of Principal College is the outlay for student assistance. If this outlay is to be reduced, the college will have to modify two of its objectives, the objective of a highly selective admission and the objective of promoting equal access to a college education for persons of approximately equal intellectual promise but of lower socio-economic status. Should these objectives be given higher priority than increased faculty salaries? Should the college rather than society through government seek to promote equal access? Why should the college not become less selective in admission, enrolling students who score above 400 on both parts of the Scholastic Aptitude Test?

There are other expenditure problems to be considered as well. Should the college continue to offer two graduate programs? Should the college continue to support a music program? Should the college continue to support a physical education program on the existing scale or on any scale? Should the college continue to maintain a student-faculty ratio of 14.5 students to one faculty member? Should the college seek to stabilize faculty salaries? Should the college reduce its overhead expenditures?

Insofar as income is concerned, there are four important matters to be considered. First, is it feasible and desirable to increase student tuition charges? Then, can income be increased by enrolling more students while holding costs at projected levels. Third, what are the reasonable prospects for increasing endowment giving and current

operating giving? Finally, what can be expected from state and federal government in helping to finance student aid?

THE SOLUTION

As president of Principal College, how do you respond to these issues?

PART II

THE CASE OF MAJOR UNIVERSITY

A Budget Exercise

for Presidents of Research Universities

THE FINANCIAL STATUS OF MAJOR UNIVERSITY

Background

Major University is a privately sponsored institution located in a large city whose metropolitan area has a population of over 1.5 million people. In the classification scheme of the Carnegie Commission on Higher Education, Major University is a research university, Class I.

The university has had a long and notable history. Although it is located in a large metropolitan area, the university has tended to think of itself as a national institution rather than as one serving regional and area needs. At the same time, the university has depended for endowment and gift support in large measure upon the wealthy citizens and large corporations of the area. Some tension has built up over the years between the university and the community, in large part because of a confusion about the objectives of the university in relation to the community.

Objectives

Major University considers its objectives to be instruction and research, undergraduate and graduate, in the physical sciences, the biological sciences, mathematics, the social sciences, and the humanities; and instruction and research in the professions of education, engineering, dentistry, law, library science, management, medicine, nursing, and social work.

The university insists that these objectives constitute a complete justification for the existence of the institution and for the performance of its programs. Affective and skill objectives in student behavior are incidental to the intellectual objectives of the university and are considered as integral to professional education.

Programs

Instruction. Major University offers an extensive array of baccalaureate, graduate, and graduate professional instructional programs.

The principal baccalaureate programs are as follows:

1. Arts and Sciences
2. Engineering
3. Management
4. Teacher Education
5. Nursing
6. Nutrition
7. Medical Technology

The principal graduate programs for both the master's degree and the doctor's degree are as follows:

1. Arts and Sciences
2. Engineering
3. Management
4. Teacher Education
5. Nursing (master's degree only)
6. Library Science
7. Applied Social Science

The principal graduate professional degrees are:

1. Doctor of Medicine
2. Doctor of Dental Surgery
3. Juris Doctor

Research. In addition, Major University is committed to an extensive research program, particularly in medicine and the biological sciences, as well as in engineering and the physical sciences. This program has been based largely upon project grants funded by administrative agencies of the federal government.

Public Service. To a much lesser extent, Major University has undertaken to perform various public services. The college of medicine has been active in regional health planning and in health manpower planning; in addition, it has cooperated with voluntary and public community hospitals in the post-M.D. training of doctors and in continuing education of the medical profession. Federal government grants under Title I of the Higher Education Act of 1965 have provided for the continuing education of urban administrators. The university has also offered consulting services in welfare administration and in environmental improvement. It has lacked the financial resources, however, to extend its public service program if it were willing to do so.

The General Situation

Major University confronts financial difficulty. Privately sponsored, it must depend for operating income upon student fees, endowment return, gifts, governmental research contracts and grants, special government assistance including student aid funds, and some miscellaneous income (mostly from clinics). The income problem is symptomatic, however, of a much more troublesome concern: the objectives of the university in relation to its resources, real and potential.

Research. Since the end of World War II, the ambitions and inclinations of faculty members have coincided with certain interests of the federal government and business corporations. Faculty members have desired to pursue their research interests and to obtain professional recognition for scholarly achievements; in addition, they have wanted to improve their economic status in American society. On the other hand, federal government agencies have desired to expand research activity in the expectation that an advancing knowledge will contribute to the solution of urgent national problems: new weapons for national security, new sources of energy, new cures for diseases. Industrial corporations have been concerned with expanding research activity which will contribute to new products for consumer, business, or governmental purchase and to new production processes which will advance production efficiency.

The faculty interests on the one hand and the governmental and business interests on the other hand coincide at Major University. The university has committed itself to extensive research and rising levels of faculty compensation. Government and business have committed themselves to the financial support of research. The university then must keep its commitment to research in some kind of balance with its instructional objectives and keep its commitment to increased expenditures in some kind of balance with its sources of income.

Instruction. A somewhat different kind of problem confronts the university in pursuit of its instructional objectives. Given the emphasis and attention devoted to faculty research interests, the university has expanded its graduate and graduate professional programs, by admitting a limited number of students to the baccalaureate programs upon the basis of high academic promise and by turning away from instructional programs designed primarily to serve youth of the surrounding urban community.

Early in the 1960's, the opportunities for public higher education in the metropolitan area were greatly expanded by the establishment, first, of a community college and, then, of a state university. Major University officially welcomed both of these actions, as it saw the growth of a community college and of a state university as advantageous in reducing urban pressures for instructional and public service programs geared directly to immediate urban needs.

As the decade of the 1960's proceeded, however, Major University began to find that problems associated with the expansion of public higher education were developing. It became somewhat more difficult to recruit able undergraduate students; some of these students, for economic and other reasons, preferred to enroll in the public institutions. The new state university began to offer graduate programs and graduate professional programs, ostensibly to meet the needs of persons living in the urban area. These new programs tended to duplicate those offered by Major University, and there was no mechanism available for joint public-private educational planning or coordination of program offerings.

The expansion of public higher education was reaching its peak late in the 1960's, at a time which coincided with a federal government slowdown of research support and an industrial slowdown of interest in higher education generally and Major University in particular. Business leaders who had contributed generously to Major University over the years began to ask exactly what these contributions meant, particularly now that public institutions of higher education supported by tax dollars were now available within the urban community.

Governance. Major University governance is vested in a board of trustees of thirty-two members elected for an indefinite term of service by the board itself. The president of the university, serving *ex officio*, is the thirty-third member of the board. Board members are required to retire at sixty-eight years of age and are thereafter designated honorary trustees. There are twenty persons who currently are so designated.

The board is comprised of twenty-nine men and three women. One half of the members live within the metropolitan area in which Major University is located. The rest live in other major cities throughout the United States. All of the board members, with the exception of one woman, are prominent persons in business and professional life. Three serve as administrative officers of other leading universities.

Basic Data - 1
Major University
Admissions

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
Admissions-Undergraduate					
Received	3,273	3,501	3,850	3,900	4,000
Accepted	2,709	2,843	3,127	3,200	3,500
Enrolled	1,215	1,150	1,300	1,300	1,300
Origin of Undergraduates					
State	2,271	2,194	2,225	2,300	2,359
Nation	2,296	2,150	2,180	2,254	2,310
Foreign	50	43	45	46	46
	4,617	4,387	4,450	4,600	4,715
Housing					
University	3,309	3,455	3,493	3,531	3,569
Other	4,268	3,839	4,027	4,319	4,576
Costs to Undergraduates					
Tuition	$2,000	$2,200	$2,310	$2,426	$2,547
Room and Board	1,300	1,300	1,365	1,433	1,505

There are no faculty or student members on the board of trustees, but the president has adopted the practice of meeting with a faculty committee and with a student committee to review matters on the board agenda and to discuss his recommendations before they are submitted to the board of trustees for consideration.

Enrollment

Student enrollment at Major University, as of 1971-72, was somewhat larger than in the two preceding years, and some additional modest enrollment increases were projected for 1972 and 1973. In long run terms, the enrollment of Major University in 1972 was about the same as it had been in 1955. There had been decreases in undergraduate and part-time enrollment; there had been increases in graduate and full-time enrollment.

The goal as of 1972 was to stabilize undergraduate enrollment at six thousand students, with not more than one thousand part-time students. The graduate enrollment was expected to be stabilized at 3,500 students, of whom two thousand would be full-time and fifteen hundred would be part-time.

Because of its heavy instructional emphasis upon the physical sciences, the biological sciences, mathematics, engineering, and medicine, the full-time enrollment of Major University was seventy percent male. The university was eager to enroll a larger number of women students, but it was not eager to change the emphasis of its instructional programs or to introduce any new instructional programs.

The number of baccalaureate degrees awarded in 1971-72 represented about eighteen percent of the undergraduate enrollment, full-time and part-time, that year. The number of graduate degrees awarded represented about thirty-seven percent of all graduate enrollments, and the number of graduate professional degrees came to eighteen percent of graduate professional enrollment.

The recent trends in enrollment and degrees awarded are shown in the accompanying table.

Admissions

Recent experience in undergraduate admissions had indicated that Major University was in stiff competition with other leading private universities in the nation. Recruitment had stressed the high academic standards and the limited number of instructional programs offered. As a result, Major University had a record of admitting around eighty percent of all applicants for undergraduate enrollment.

Basic Data – 2
Major University
Enrollment

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
Undergraduate					
Full-time	4,617	4,387	4,450	4,600	4,715
Part-time	940	893	950	950	960
	5,557	5,280	5,400	5,550	5,675
Graduate					
Full-time	1,923	1,870	1,910	1,960	2,000
Part-time	1,468	1,420	1,660	1,490	1,540
	3,391	3,290	3,570	3,450	3,540
Graduate Professional					
Full-time	1,037	1,037	1,160	1,290	1,430
Part-time	75	75	90	100	100
	1,112	1,112	1,250	1,390	1,530
TOTAL	10,060	9,682	10,220	10,390	10,745
Full-Time					
Male	5,281	5,084	5,241	5,471	5,677
Female	2,296	2,210	2,279	2,379	2,468
Degrees Granted					
A.B. & B.S.	1,064	1,000	950	1,030	1,050
M.A. & M.S.	970	989	1,008	1,027	1,047
Ph.D.	295	301	307	313	319
Graduate Professional	227	227	230	233	236

Of those admitted, however, only about forty percent actually did enroll. Undergraduate enrollment clearly depended upon scholarship awards made to students upon the basis of high school and test score achievement.

This situation is further illustrated by the fact that about half of all undergraduate enrollments came from outside the state in which Major University was located.

The university housed less than half of its undergraduate enrollment and was reluctant to expand its residential facilities because of student opposition to any housing requirements. The neighborhood surrounding Major University was a deteriorating one in which private housing facilities tended to be substandard, but the president believed that it was not expedient for the university to invest in any additional undergraduate student housing.

At the graduate and graduate professional level of instruction, admission standards were also rigorous. Applications for admission to medicine, dentistry, and law greatly exceeded the capacity of the university. As a result, many promising students were rejected because the entering enrollments in these programs were limited; applications for graduate study, except in nursing and social work (applied social sciences), tended to exceed the goals set for admission. The university refused to admit graduate or graduate professional students, full-time or part-time, who did not meet its high admission standards.

The tuition charge at Major University was the same for undergraduate and graduate students and had been increasing steadily during the 1960's. The president, however, was still disposed to believe that the tuition charge was relatively modest for a private institution of its standing, and a further incremental increase was scheduled for 1973.

Staffing

Insofar as the staffing of Major University was concerned, the number of full-time equivalent faculty members employed by the university was continuing to increase, although the rate of increase had been slowed down in 1971-72 as compared to the 1970 rate.

The student-faculty ratio was expected to be somewhat higher in 1972 than it was in 1971, but the 1973 projection was simply a return to the student-faculty ratio which had existed in 1969.

The president was generally satisfied with the distribution of the faculty by rank, although he recognized that there would be

Basic Data – 3
Faculty
Major University

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
Staffing					
Professor	187	197	201	204	207
Assoc. Professor	176	198	206	215	225
Asst. Professor	225	245	248	250	252
Instructor	63	48	40	28	17
	651	688	695	697	701
Compensation					
Average Salary	$13,874	$14,238	$14,950	$15,698	$16,483
Fringe Benefits	1,864	2,053	2,093	2,354	2,637
Average Compensation by Rank					
Professor	18,943	18,937	19,694	20,482	21,301
Associate	13,763	14,054	14,616	15,201	15,809
Assistant	11,154	11,583	12,046	12,528	13,029
Instructor	9,030	9,614	9,998	10,398	10,814
Average Teaching Load					
Science & Engineering	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.
Humanities & Social Sciences	9 hrs.	9 hrs.	9 hrs.	9 hrs.	9 hrs.
Student-Faculty Ratio	12.6	11.4	11.8	12.2	12.5

increased pressure for promotions to the full professor and associate professor ranks now that faculty turnover had declined.

The average faculty compensation for 1972 was $18,000, but the compensation averages by rank fell only at the fortieth percentile on the AAUP compensation scales. The president believed that faculty compensation was too low for a university of its general reputation, and he desired an increase of the averages by ranks.

Balance Sheet

Liabilities. Major University had incurred operating deficits since 1969. As a result, the liabilities of the corporation included as one item an accumulated deficit, which would have been much larger if endowment funds and other gifts had not been utilized to reduce it.

Assets. The assets of the university had increased year by year, but the growth of 1971-72 over 1970-71 had been modest. Somewhat larger increases were projected for 1972 and 1973, but this anticipated growth depended entirely upon the success of the gift and bequest program of the university.

The primary asset was investment in plant. The university was engaged in an extensive program for new capital construction, and most of the fund requirements for this construction had been raised through gift solicitation and federal government facility grants. The university debt for facilities in relation to the book value of its capital plant was quite reasonable and did not constitute a burdensome item of current expense.

On the other hand, the endowment fund of eighty-six million dollars was relatively modest for a university of such outstanding quality. In recent years there were substantial efforts to expand and improve capital plant, because federal government grants and private gifts had been readily available for this purpose. Endowment growth had not kept pace with the plant expansion. In addition, the sudden advent of current operating deficits impeded an increase in the endowment.

Major University was committed to a reduction in the operating deficit and the accumulated deficit in 1972-73 and again in 1973-74. If gift solicitation and efforts to reduce operating expenditures were both successful, this commitment then could be fulfilled.

Basic Data – 4
Major University
Balance Sheet, June 30
(Thousands of Dollars)

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
ASSETS					
Current Funds					
Cash	$ 815	$ 370	$ 400	$ 500	$ 500
Temporary Investments	270	1,015	1,000	1,000	1,000
Accounts Receivable					
U.S. Government	2,100	2,100	2,000	2,000	2,000
Other	1,220	1,215	1,300	1,300	1,300
Inventories	790	900	800	800	900
Prepaid Expense	560	400	500	500	600
Advances to other Funds	9,370	10,790	9,550	8,750	8,750
Advances to Loan Funds	790	920	1,000	1,200	1,500
	$ 15,915	$ 17,710	$ 16,550	$ 16,050	$ 16,550
Loan Funds					
Cash	35	10	40	50	50
Temporary Investments	360	640	650	650	700
Notes Receivable	10,525	11,840	12,500	14,000	15,000
Advances to other Funds	610	560	500	250	-0-
	$ 11,530	$ 13,050	$ 13,690	$ 14,950	$ 15,750
Endowment					
Cash	830	1,260	1,000	1,000	1,000
Advances to other Funds	280	650	1,000	1,000	1,000
Investments	84,550	82,730	82,000	85,000	90,000
Life Income Funds	1,920	1,935	2,000	2,500	3,000
	$ 87,580	$ 86,575	$ 86,000	$ 89,500	$ 95,000
Plant Funds					
Cash and Investments	4,320	4,220	4,000	4,000	4,000
Land and Improvements	12,500	12,650	13,000	13,000	13,000
Buildings	77,800	80,200	83,000	93,000	103,000
Fixtures and Equipment	23,900	24,750	25,000	26,000	27,000
Buildings in Progress	40,100	42,100	40,000	30,000	20,000
	$158,620	$163,920	$165,000	$166,000	$167,000
TOTAL ASSETS	$273,645	$281,255	$281,240	$286,500	$294,300

Basic Data – 4 (Cont.)

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
LIABILITIES AND FUND BALANCES					
Current Funds					
Accounts Payable	$ 2,070	$ 3,795	$ 3,000	$ 2,500	$ 2,500
Deferred Income	1,050	1,390	1,400	1,400	1,400
Due other Funds	10,040	10,470	10,000	10,000	10,000
Notes Payable	300	300	300	-0-	-0-
Funds Held for Others	190	170	150	150	150
Reserves	9,235	10,870	12,000	12,000	12,000
Accumulated Deficit	(6,970)	(9,285)	(10,300)	(10,000)	(9,500)
	$ 15,915	$ 17,710	$ 16,550	$ 16,050	$ 16,550
Loan Funds					
Due other Funds	40	25	50	100	100
Promissory Notes Payable to U.S. Government	925	920	900	1,000	1,000
Fund Balances	10,565	12,105	12,740	13,850	14,650
	$ 11,530	$ 13,050	$ 13,690	$ 14,950	$ 15,750
Endowment					
Fund Balances	85,660	84,640	84,050	86,500	91,500
Life Income Fund Balances	1,920	1,935	1,950	3,000	3,500
	$ 87,580	$ 86,575	$ 86,000	$ 89,500	$ 95,000
Plant Funds					
Due other Funds	-0-	1,000	1,000	1,000	1,000
Bonds Payable to State Facilities Fund	2,500	4,000	3,800	3,600	3,400
Short Term Notes	2,000	300	300	300	300
Mortgage Note	320	300	-0-	-0-	-0-
Note Payable to Endowment Fund	-0-	800	1,000	1,000	1,000
Mortgage Bonds	16,250	15,500	14,750	14,000	13,000
Contracts Payable	4,500	3,500	3,500	3,000	3,000
Net Plant Investment	133,050	138,520	140,650	143,100	145,300
	$158,620	$163,920	$165,000	$166,000	$167,000
TOTAL LIABILITIES	$273,645	$281,255	$281,240	$286,500	$294,300

THE PROBLEM

Current Income and Expense

The current income of Major University was some 7.7 million dollars greater in 1971-72 than in 1969-70, and further increases were projected for 1973 and 1974. Yet, current expenditures had continually exceeded current income in each of these years.

A quick glance at the income and expense data for Major University quickly identifies the problem as one arising in connection with the instruction and general operation of the university. Expenditures for sponsored research were offset by income provided for this purpose. Since most of the sponsored research income was derived from the federal government, the expenditures were necessarily limited to the available grants. Public service income and expenditure were likewise maintained in balance.

Auxiliary service expenditures continually exceeded the income available for these purposes. The deficit of $600,000 in 1971-72 was attributed to an excess of expenditures over income for intercollegiate athletics in the amount of $400,000, and an excess of expenditures over income in operation of a bookstore, amounting to $200,000.

Major University received income earmarked for student aid purposes in the amount of $3,100,000 in 1971-72, but it spent $4,200,000 for student aid that year. Deficits of approximately the same magnitude were projected for 1973 and 1974.

The largest deficit account, however, was that for instruction and general operation. In 1971-72, instructional expenditures came to forty million dollars, while instructional income was only 36.8 million dollars, a difference of 3.2 million dollars out of a total deficit of 4.9 million dollars. Moreover, similar deficits would probably occur in 1973 and 1974.

The Board Position

Although the board of trustees had approved a current operating budget calling for the expenditure of 76.4 million dollars in 1972-73, compared with anticipated income of 70.5 million dollars, they had made it clear that they expected some economies to be realized in actual operation during the year.

Basic Data – 5
Major University
Current Income and Expense
As of June 30 Each Year
(In Thousands of Dollars)

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
INCOME					
Instruction and General					
Student Fees	$15,900	$17,400	$19,400	$20,400	$21,500
Endowment	5,620	5,860	6,000	6,300	6,500
Gifts	3,865	2,830	3,000	3,500	4,000
Overhead Earned	3,685	3,900	3,900	3,900	3,900
State Subsidy	1,700	1,700	2,500	2,500	2,500
Other	1,700	1,900	2,000	2,500	2,500
	$32,470	$33,590	$36,800	$39,100	$40,900
Research					
Federal	19,000	18,500	18,500	18,500	18,500
Other	2,200	2,700	2,700	2,700	2,700
	21,200	21,200	21,200	21,200	21,200
Public Service					
Federal	300	800	500	500	500
Other	200	500	500	500	500
	500	1,300	1,000	1,000	1,000
Auxiliary Services	5,100	5,300	5,600	5,900	6,200
Student Aid					
Federal	1,250	1,300	1,500	1,600	1,700
Endowment & Gifts	1,500	1,550	1,600	1,700	1,800
	2,750	2,850	3,100	3,300	3,500
GRAND TOTAL	$62,020	$64,240	$67,700	$70,500	$72,800

Basic Data – 5 (Cont.)

	Actual			Projected	
	1969-70	1970-71	1971-72	1972-73	1973-74
EXPENDITURES					
Instruction and General					
Departmental Instruction and Research	$22,700	$22,000	$24,600	$26,800	$28,700
Instructional Services	425	200	300	400	500
Libraries	1,900	2,100	2,300	2,500	2,700
Student Services	1,750	1,750	1,900	2,100	2,300
Plant Operation	4,300	4,700	5,200	5,500	6,000
General Expense	2,100	2,400	2,600	2,800	3,000
Administration	2,800	3,100	3,100	3,300	3,300
	$35,975	$36,250	$40,000	$43,400	$46,500
Research	$21,200	$21,200	$21,200	$21,200	$21,200
Public Service	500	1,300	1,000	1,000	1,000
Auxiliary Services	6,050	6,000	6,200	6,300	6,400
Student Aid	4,200	4,150	4,200	4,500	4,500
GRAND TOTAL	$67,925	$68,900	$72,600	$76,400	$79,600
Excess of Expenditures Over Income	5,905	4,660	4,900	5,900	6,800
Transfers from Current Fund	2,000	2,285	3,885	6,200	7,300
NET DEFICIT	3,905	2,375	1,015	($ 300)	($ 500)

In May, 1972, however, the board completely rejected the income and expenditure projection for 1973-74 and instructed the president that, as of May, 1973, he was to present to them a balanced budget for the ensuing academic year. The board delegated to the president the authority needed on their behalf to plan for a balanced budget. He was instructed to review all aspects of the operation of the university during the summer of 1972 and to begin discussions of desirable budget actions that autumn.

Research and Public Service

Because income and expenditures were in balance for the research and public service program of the university, the president decided to give very little attention to these two areas of activity. He did realize that he would have to be alert to the possibility that in various hidden ways the instructional budget might actually be subsidizing these research and public service projects. The public service budget was one million dollars, however, and only a minor part of the total operating budget, another reason for giving slight concern to this activity.

Auxiliary Services

Housing. The housing program operation at Major University was generally satisfactory. Income from room and board charges was sufficient to meet the costs of operation plus the debt service requirements. Some of the residence facilities were old and rather small, and operating economies would be elusive until two new buildings currently under construction replaced them. All food service operations took place in two relatively new facilities and also appeared to be operating satisfactorily.

Bookstore. The bookstore had an operating deficit because there was a university policy to sell all text books at a twenty percent discount and because the bookstore sold all used books at the price which had been paid to the student. As a result, income from bookstore operations has failed to meet direct operating costs and overhead costs. Students have expressed satisfaction with the bookstore, but have paid little or no attention to the deficit it has accumulated.

Athletics. Major University has an extensive intercollegiate athletic program on a purely amateur basis. The university offers no grants-in-aid or other subsidies to students with athletic ability.

There is no charge for athletic events and attendance is small. The university athletic teams compete with other colleges and universities with a similar athletic program in football, basketball, track, tennis, golf, wrestling, swimming, soccer, and rowing. The coaches are paid from the undergraduate physical education budget, and the expenses are covered by an intercollegiate athletic budget which draws only limited income from endowment, gifts, and admission charges. As a consequence, in 1972, there was a $400,000 deficit in the intercollegiate athletic budget.

Student Aid

In 1972, income for student aid purposes was 1.1 million dollars less than the expenditures for this purpose. Meanwhile, the admissions office, which also handled student aid, was insisting that the university outlay for student assistance was woefully inadequate. The director of admissions and student aid argued that the quality and the number of students admitted to undergraduate study might be substantially increased if the student aid budget were twice its present size. He argued that Major University could not effectively compete for students with SAT scores at 550 and above on both the verbal and mathematics sections when its student assistance budget was so low. He pointed out that the relationship of enrollment to admissions was unusually low for a university of the general reputation of Major University and that this relationship could only be altered by an increase in the student aid budget.

At the graduate professional level of enrollment, the amount of student assistance was restricted to the level of outside income available and earmarked for this purpose. Fellowship assistance at the graduate level was also restricted to available income, although many full-time graduate students were employed as part-time teaching or research assistants. Some departments were very much concerned about the small number of fellowships and teaching or research assistantships currently available for recruitment of promising graduate students.

Instruction

When the president turned to examination of the instructional budget as a whole, he concentrated on the distribution of income and expenditures. The 1971-72 experience had been as follows:

Income		Expenditures	
Student Fees	53%	Departmental Instruction	61%
Endowment	16%	Instructional Services	1%
Gifts	8%	Libraries	6%
Earned Overhead	10%	Student Services	5%
State Subsidy	7%	Plant Operation	13%
Other	6%	General Expense	6%
	100%	Administration	8%
			100%

Income. Student charges were thus providing slightly more than half of all instructional income. The student fees were known to be lower than those for other universities and even private liberal arts colleges of comparable quality. At the same time, the director of admissions argued strongly that the lower fee charge was the one competitive advantage Major University had in relation to these other universities and colleges, and he strongly opposed any increase in these fees. In addition, he feared a loss of student enrollment to the public institutions of the urban area if student tuition were increased. He also pointed out that when a university is located within the limits of a central city, students and their families, concerned about personal safety, may be discouraged from enrolling.

Endowment and gift income produced almost one quarter of all instructional and general income. This appeared to be a good record for Major University, but it could be maintained only if expenditures could be stabilized, endowment and gift income increased, or both.

The overhead income earned, primarily in connection with federal government grants and contracts, amounted to ten percent of general income in 1971-72 and almost one third of the university's expenditures for overhead (student services, plant operation, general expense, and administration). The continuation of this support was dependent upon the volume of federal government sponsored research activity each fiscal year and the proportion of this sponsored research which each year might be granted to Major University. Although this support had been fairly consistent in the three years from 1969-70 to 1971-72, the danger was always present that such support might be curtailed. If this were to happen, obviously, the university would be in even more serious financial difficulty.

The state government had begun in 1969 to provide a financial subsidy to Major University's college of medicine. In 1971-72, this

had amounted to two million dollars. In 1971, the state government had also begun to provide a subsidy to the college of dentistry. With both of these subsidies, the state government had recognized the high cost of these instructional programs, the current shortage of personnel in the health professions, and the economy of supporting these colleges in lieu of creating new state university colleges of medicine and dentistry. This action had received some criticism by a few state university presidents who believed that these programs should be operated only by the state universities.

The president of Major University recognized that the two state subsidies were now essential to the support of the university and that considerable effort, including some modification in admissions practice, would be required in order to continue to obtain this income.

Other income represented for the most part charges collected for clinical services, miscellaneous rental charges for use of facilities, and interest earned on current funds investments.

Expenditures. On the expenditure side, the president was gratified to observe that the overhead costs did not exceed thirty-two percent of the total outlay for instruction and general operation. At the same time, that total outlay, nearly thirteen million dollars in 1971-72, represented a substantial amount of money and called for careful scrutiny.

The vice president for administration reported that the expenditures for plant operation were bordering on the danger zone by the sacrifice of essential needs in preventive maintenance. The extensive construction program of Major University, carried out during the 1960's and still not completed, had made it possible to reduce maintenance costs. This advantage would not continue indefinitely. Furthermore, the university would have to face increased outlays for utility services and for plant security.

The vice president for student services was convinced that the university was also slighting essential needs of the students. If the admissions staff were enlarged, the student recruitment program could be advanced. But this need was predicated upon the assumption that Major University desired to enroll more students. The student registration program was generally adequate but would have to be changed if enrollments were increased. The student counseling service was already unable to cope with the volume of requests from students for advice on and assistance with their academic and personal problems. The result was an outgrowth of

student complaints. Moreover, although counseling and supervision of students residing in residence halls had largely been discontinued, there was growing concern about property damage and security in these halls. The student health service was operated in conjunction with the college of medicine, and costs had been kept relatively low in this way. Again, however, there were questions about the adequacy of these arrangements. Overall, the vice president for student services presented a picture of inadequate support activities.

The president then turned to the nearly six million dollars spent for general expense and administration. He found that this outlay in 1972 had gone for the following operations:

Office of Development and Public Information	$1,800,000
Office of Administration	1,300,000
Administrative Systems	600,000
Office of Academic Affairs	500,000
Office of the President	200,000
Publications and Printing	500,000
Communication Service	500,000
Insurance	300,000
	$5,600,000

The Office of Development and Public Information had the most expensive program. This operation was responsible for a wide variety of activities, including alumni relations, current gift solicitation, endowment expansion, community relations, state government relations, and public information. The president was doubtful whether or not it would be feasible to curtail or economize any of these functions.

The activities of the Office of Administration included budgeting, personnel, bursar, accounting, auditing, legal service, investment service, procurement service, and supervision of plant and logistical services. The expenses of the central computer service for administrative operations, of communication service (telephone and mail), of general printing service, and of insurance (including unemployment compensation) were shown separately, even though these activities were also under the responsibility of the Office of Administration. These operations appeared to be handled with commendable effectiveness, and opportunities for economy would have to be explored in considerable depth.

The Office of Academic Affairs administered all research grants and contracts and supervised all instructional programs. In addition,

the expenses of operating a faculty senate were charged to this office.

The Office of the President was relatively small and encompassed the expenses arising from the activities of the board of trustees, including the secretary to the board.

Thus, although the total outlay for general and administrative expense was sizeable, the prospects for any substantial economies were not encouraging unless the university were willing to curtail its development program or to abandon some of its administrative operations. The sacrifices in either effort could mean a loss of income and a deepening of the financial difficulties confronting Major University.

Departmental Instruction and Research

Staffing. The principal area requiring extensive review and analysis was that of departmental instruction and research. To begin, the president examined the staffing pattern for each of the colleges as they had operated in 1971-72. The number of faculty positions and the number of teaching assistants allotted to each college is shown herewith. There were a total of 695 faculty positions on a full-time equivalent basis, and there were seven hundred teaching assistants assigned to eight out of thirteen of the instructional colleges.

The position of teaching assistant was generally considered to be important both to instruction and to graduate student recruitment. In the college of medicine, the teaching assistants were the interns and residents in affiliated teaching hospitals, one half of whose average compensation was carried by Major University. This arrangement was a part of the affiliation agreement between the teaching hospitals and the university.

The average compensation of teaching assistants was $6,500 a year, but, for all but the medical interns and residents, the cost of tuition was deducted from this stipend prior to actual payment of the compensation. Teaching assistants were considered full-time students and part-time instructors.

When the number of students on a full-time equivalent basis was calculated by colleges, the staffing pattern revealed considerable variation. The student-faculty ratio was lowest for the college of medicine; the ratio was highest for the college of general studies (largely staffed by teaching assistants) and for the college of management and the college of education. Both of these latter

Staffing Pattern
of
Instructional Colleges
1971-72

	Faculty Positions	Teaching Assistants
College of Physical Sciences and Engineering	190	250
College of Biological Sciences	100	110
College of Humanities	90	100
College of Social and Behavioral Sciences	50	60
College of Management	35	20
College of Education	35	20
College of Applied Social Science	10	–
College of Library Science	5	–
College of Law	20	–
College of Dentistry	40	–
College of Medicine	75	80
College of Nursing	35	–
College of General Studies	10	60
	695	700

colleges had a limited curriculum and tended to have larger classes than did the other instructional colleges.

The justification for the staffing pattern appeared to be a matter of historical development, influenced by the instructional emphasis which had occurred in the years since 1945.

The pattern of allocation of teaching assistants seemed also to be influenced by a graduate emphasis which had grown up in the university over the past twenty-five years.

Compensation. Analysis of the staffing and enrollment data for the instructional colleges was only a preliminary step to an analysis of expenditure and income data for each college. Given the staffing pattern of faculty positions and of teaching assistants, the president found it relatively simple to determine faculty compensation and teaching assistant compensation for each college.

Faculty compensation by colleges did not vary substantially from the average faculty compensation for the faculty as a whole. Average compensation was somewhat, but not appreciably, higher in the college of medicine; clinical faculty members practicing in the affiliated teaching hospitals received additional income from their patients. As a result, the university salaries for the clinical staff remained generally comparable with those in the rest of the university.

Support. The faculty support expenditures included the outlay for instructional supplies and equipment, for travel, for secretarial assistance, and for the dean's office in each college. These expenditures amounted to two thirds of the cost of faculty compensation.

In order to determine the total expenditure of each instructional college, it was necessary to allocate the cost of instructional support (instructional services and library) and of university overhead (student services, plant operation, general expense, and general administration) to each of the instructional colleges. The president decided not to include the net cost of student assistance within this allocation on the grounds that this program had a separate objective (to equalize access to Major University), apart from the instructional objectives of each instructional college.

Several possible procedures for the allocation of instructional support and of overhead were considered. One possibility was to allocate support and overhead on the basis of faculty compensation. Another possibility was to allocate both costs on the basis of net square footage of the university plant utilized by each college. Both of these procedures were discarded however, in favor of an allocation based upon student enrollment.

Full-Time Equivalent Student Enrollment and Student Faculty Ratios 1971-72

	Undergraduate Enrollment	Graduate Enrollment	Ratio Students to Faculty	Ratio Students to Teaching Assistants
Physical Sciences and Engineering	1,000	850	10-1	8-1
Biological Sciences	600	350	10-1	9-1
Humanities	800	250	12-1	11-1
Social and Behavioral Sciences	450	250	14-1	12-1
Management	500	450	27-1	48-1
Education	700	350	30-1	53-1
Applied Social Science	–	140	14-1	–
Library Science	–	60	12-1	–
Law	–	340	17-1	–
Dentistry	–	260	7-1	–
Medicine	–	320	4-1	4-1
Nursing	300	130	12-1	–
General Studies	400	–	40-1	7-1
Total	4,750	3,750		
Average	–	–	12-1	12-1

At the same time, it was readily apparent that an allocation based upon a full-time equivalent student enrollment which made no differentiation by level of student would be unrealistic. Accordingly, a weighting scheme was devised whereby undergraduate enrollments were counted as one unit and graduate enrollments generally as three, except that a weight of two was employed for graduate enrollments in the college of management, the college of education, the college of applied social science, the college of library science, and the college of nursing. This differential was made in recognition of the fact that the graduate enrollments in these colleges were primarily at the master's degree level. The college of medicine was assigned a weight of four because of the extensive space occupied by this instructional program. The result of these calculations provided a total expenditure pattern for each college, ranging from a low of $280,000 to a high of $10,875,000. Such a distinction would have been possible without an imposed weighting scheme only if each instructional college had previously maintained a careful expenditure analysis which distinguished between costs of the college for undergraduate instruction and costs of the college for graduate instruction. No such analysis had been maintained in any of the instructional colleges.

On a per student basis, the average instructional expenditure for Major University was $4,762. But the expenditures ranged from a low of $2,487 in the college of general studies to a high of $16,437 in the college of medicine. In general, the expenditure pattern revealed no particular surprises for an institution of the type represented by Major University.

Instructional Expense Versus Income

The analysis up to this point was still incomplete. There was one further important step, a comparison of expenditures and income produced by each of the instructional colleges. It was relatively simple to determine the student tuition income generated by each college. The number of full-time equivalent enrollments based upon course enrollments multiplied by the tuition charge provided the student income attributed to the instructional activity of each college.

It was then necessary to assign earmarked endowment income and earmarked gifts to each instructional college. It was found that of the total endowment and gift income, nine million dollars, received for instructional and general purposes, all but some $2,640,000 was

Expenditures of Instructional Colleges
1971-72

	Faculty Compensation	Faculty Support	Teaching Assistants	Allocation of Instructional Support and of Overhead	Total
Physical Science and Engineering	$ 3,350,000	$2,400,000	$1,625,000	$ 3,500,000	$10,875,000
Biological Sciences	1,750,000	1,350,000	715,000	1,550,000	5,365,000
Humanities	1,500,000	650,000	650,000	1,500,000	4,300,000
Social and Behavioral Sciences	860,000	400,000	390,000	1,250,000	2,900,000
Management	600,000	200,000	130,000	1,500,000	2,430,000
Education	600,000	200,000	130,000	1,650,000	2,580,000
Applied Social Science	175,000	80,000	–	300,000	555,000
Library Science	85,000	40,000	–	155,000	280,000
Law	350,000	150,000	–	1,075,000	1,575,000
Dentistry	685,000	330,000	–	770,000	1,785,000
Medicine	1,340,000	2,000,000	520,000	1,400,000	5,260,000
Nursing	600,000	200,000	–	300,000	1,100,000
General Studies	105,000	50,000	390,000	450,000	995,000
	$12,000,000	$8,050,000	$4,550,000	$15,400,000	$40,000,000

Total Expenditures and Expenditures Per Student by Instructional Colleges 1971-72

	Total Expenditures	Total Enrollment	Expenditure Per Student
Physical Sciences and Engineering	$10,875,000	1,850	$5,878
Biological Sciences	5,365,000	950	5,647
Humanities	4,300,000	1,050	4,095
Social and Behavioral Sciences	2,900,000	700	4,143
Management	2,430,000	850	2,859
Education	2,580,000	1,050	2,457
Applied Social Science	555,000	140	3,964
Library Science	280,000	60	4,667
Law	1,575,000	340	4,632
Dentistry	1,785,000	260	6,865
Medicine	5,260,000	320	16,437
Nursing	1,100,000	430	2,558
General Studies	995,000	400	2,487
	$40,000,000	8,400	$4,762

earmarked for the benefit of a particular instructional college. Endowment income was large for the college of medicine; current giving was also substantial for the college of physical sciences and engineering. The college of management was well supported from current gifts. In addition, the colleges of law and nursing were the beneficiaries of substantial endowment income.

Since Major University recovered 3.9 million dollars from research grants and contracts for overhead support, it was necessary to credit this income to the instructional units whose research activity generated this income. It was found that almost all of the income was attributable to the college of medicine, the college of the physical sciences and engineering, and the college of biological sciences.

Other income generated by the instructional colleges came primarily from the state government in support of medical and dental instruction, plus income from the dental clinics and from the general management of the university and its facilities. Thus, the total instructional income in 1971-72 came to a total of 36.8 million dollars.

The president then proceeded to compare the expenditures of the various instructional colleges with the instructional income. The results were somewhat surprising. The first obvious fact was that only one instructional college had income considerably in excess of expenditures, the college of nursing, and this excess income was generally devoted to scholarship assistance for paying the tuition charges for students of nursing. Because the state government was beginning to provide financial assistance to the programs of dental and medical education, as well as to other sources of income, the colleges of dentistry and of medicine were not major drains upon the general resources of the university.

The largest deficits between expenditures and income were incurred by the college of physical sciences and engineering, the college of biological sciences, and the college of the humanities. The deficit was also sizeable for the college of the social and behavioral sciences. The college of management, on the other hand, produced a small surplus, as did the college of general studies.

The accumulated instructional deficits of the instructional colleges amounted to some seven million dollars, against which Major University had only four million dollars of income to apply toward meeting them. It was obvious that some action was necessary to meet this gap if the operating deficit of the university were to be reduced.

Income Attributable to Instructional Colleges

1971-72

	Student Fees	Endowment and Gifts	Overhead Earned	Other	Total
Physical Sciences and Engineering	$4,250,000	$1,750,000	$1,350,000	$ -0-	$ 7,350,000
Biological Sciences	2,195,000	900,000	900,000	-0-	3,995,000
Humanities	2,425,000	300,000	-0-	-0-	2,725,000
Social and Behaviorial Sciences	1,625,000	300,000	200,000	-0-	2,125,000
Management	1,995,000	500,000	-0-	-0-	2,495,000
Education	2,455,000	60,000	-0-	-0-	2,515,000
Applied Social Science	325,000	230,000	-0-	-0-	555,000
Library Science	15,000	40,000	-0-	25,000	80,000
Law	785,000	500,000	-0-	-0-	1,285,000
Dentistry	600,000	100,000	50,000	1,000,000	1,750,000
Medicine	815,000	1,000,000	1,400,000	2,000,000	5,215,000
Nursing	990,000	480,000	-0-	-0-	1,470,000
General Studies	925,000	200,000	-0-	-0-	1,125,000
Undistributed	-0-	2,640,000	-0-	1,475,000	4,115,000
	$19,400,000	$9,000,000	$3,900,000	$4,500,000	$36,800,000

Comparison of Income and Expenditures
Instructional Colleges
1971-72

	Expenditure	Income	Difference
College of Physical Sciences & Engineering	$10,875,000	$7,350,000	−$3,525,000
College of Biological Sciences	5,365,000	3,995,000	−1,370,000
College of Humanities	4,300,000	2,725,000	−1,575,000
College of Social & Behavioral Sciences	2,900,000	2,125,000	− 775,000
College of Management	2,430,000	2,495,000	+ 65,000
College of Education	2,580,000	2,515,000	− 65,000
College of Applied Social Science	555,000	555,000	−0−
College of Library Science	280,000	80,000	− 200,000
College of Law	1,575,000	1,285,000	− 290,000
College of Dentistry	1,785,000	1,750,000	− 35,000
College of Medicine	5,260,000	5,215,000	− 45,000
College of Nursing	1,100,000	1,470,000	+ 370,000
College of General Studies	995,000	1,125,000	+ 130,000
Undistributed	−0−	4,115,000	+ 4,115,000
	$40,000,000	$36,800,000	−$3,200,000

Issues

With such data as were at hand about the income and expense of Major University, the president perceived that a number of issues would have to be resolved before a balanced budget could be presented to the board of trustees. Equally important was the procedure to be utilized in the consideration of those issues.

It was obvious that the faculty would have to participate in the review of the budget situation. Was it preferable to work with a special committee of the faculty, with a committee of the faculty senate, or with the entire faculty senate (thirty members in addition to the deans)? Was it desirable to present the issues to the entire faculty before discussions began with a committee or with the senate? How much information should be provided initially to all faculty members? What kind of time table should be imposed for faculty discussion? Was the objective of faculty involvement simply communication about a troublesome situation, an appeal for suggestions and ideas about how to deal with the current financial crisis, or actual faculty recommendations about handling the financial crisis?

It was apparent, also, that some student involvement was desirable, but the extent was uncertain. Should student attitudes be sought only about the bookstore deficit and intercollegiate athletics? Should students be invited to review the scope of all student services offered by the university and to present proposals for improvement, expansion, and financing of these services? Should students be asked to examine the objectives, programs, and finances of the university as a whole? Should it be assumed that students were little interested in research and public service programs, and should they be requested to consider only those issues with which they would be directly concerned, such as admissions, enrollment size, instructional programs, the student aid program, the residence program, and the student services programs? How should student involvement be structured? Should separate discussions take place with the student senate (undergraduate) and the council of graduate students? Should committees of these two groups be invited to meet with administrative officers? Should special ad hoc *student committees or one student committee be appointed by the president with advice from the deans? Where, and to whom, should the president look for advice about how to resolve these procedural issues concerning student involvement?*

Beyond the faculty and the students were the external constituencies to which the university must look: alumni, community leaders in

the urban area, private foundations, professional leaders, officials of state government, and federal government agencies. To what extent was it desirable or necessary to involve any or all of these constituencies in the consideration of the financial problems of Major University?

Then there was the problem of the role of the board of trustees. The trustees had asked for a balanced budget by May, 1973. Was it realistic to wait until that time to involve the board in all the issues and to expect the members to make all the necessary decisions at that time? Would it be preferable to involve board members in the discussions from the outset? And in what discussions should board members participate – discussions with the faculty, discussions with students, discussions with the administrative staff? In the light of the many professional, community, and personal interests of board members, how much time could they be expected individually to give to these discussions? And should all board members be invited only to discussions which might fit the general pattern of committee assignments within the board? How should general communication throughout the discussion process be arranged for all board members?

The final procedural decision for the president was the extent and role of administration review of the financial issues. Should it be confined to the president's cabinet of four vice presidents? Should administration review also involve the council of deans? Should it be organized on an ad hoc *basis? Should administration review proceed simultaneously with discussions with the faculty and students? Should administration review begin when the other discussions were terminated or had produced all the ideas they were likely to offer? Should department heads be considered part of administration for purposes of this procedure and how should they be involved in the review?*

Once these procedural questions were resolved on a tentative basis, it was essential that the substantive issues to be considered should be formulated with some precision and some care.

First, it was necessary to emphasize that the objective of the entire effort was the presentation to the board of trustees, in May, 1973, of a current operating budget which had a balance of expenditures with income. This purpose was to subordinate all other interests and all other concerns.

Secondly, careful attention had to be given to the possibilities of increasing income. Here, the major issues appeared to be:

1. Should student tuition charges be increased? If so, by how much? What should be the role of student tuition in financing the instructional programs of the university? What is and what should be the relationship of tuition charges to student aid programs, both those internally and those externally financed? Should there be a differential tuition charge by program or by level of instruction?

2. To what extent could income be increased by expanding the enrollment of the university? Could more students enroll without any increase in facilities or operating expense? Are additional students available? Would additional students mean a reduction in the quality of instructional programs? How would such reduction be evident and how could it be measured? Is an expanded student recruitment program feasible for some parts of the university? For all parts of the university?

3. To what extent is it feasible and desirable to increase endowment and gift income of the university? What can departments and colleges do to be more effective in obtaining endowment gifts and gifts for current operating expenses?

4. Would the financial position of the university be improved if more research grants and contracts were forthcoming from federal government agencies? What should be done to obtain more research funds? Are there reasonable prospects that more funds might be available if the university actively sought such funds?

5. Could the university do more to obtain "other" income? Are cash balances being kept at a minimum level? Could departments produce additional income through public service activities such as the dental clinic? Could departments do more in the field of continuing education and charge for this service?

6. Is it reasonable to expect any additional income from state government? What would be the basis for requesting and obtaining additional income?

7. Should charges for books and other articles sold by the bookstore be increased to the point where the bookstore "breaks even" or accumulates some surplus?

8. What are the prospects for obtaining increased student aid support for undergraduate students? Is such increased funding to be sought from the federal government, the state government, private groups, or all three?

9. What can be done to increase the financial assistance needed by graduate students? Should more part-time graduate students be recruited?

In the third place, there is a need to review all expenditure categories of the university and to seek possibilities for reducing various outlays. Here the major issues appeared to be:

1. Are instructional programs over-staffed? Should the student-faculty ratio be increased? Should the amount of time available to the faculty for research and public service charged to the instructional budget be reduced? Should more faculty time devoted to research be transferred to the research budget and be funded by research income?

2. Could faculty salaries be substantially increased if faculty workloads were increased?

3. Is the cost of instructional support unreasonably high? Could economies be achieved by a reduction in the secretarial and stenographic assistance provided to faculty members? Could the expenditures for instructional supplies and equipment be reduced? Should support of faculty travel be curtailed or eliminated? Could the expense of college administration be reduced?

4. Should the cost of teaching assistants be curtailed?

5. Should intercollegiate athletics be eliminated and all physical education be left to individual students without university direction or supervision?

6. Should the bookstore be eliminated?

7. Are expenditures for library support generally adequate or could these be reduced?

8. Where could economies be achieved in university overhead: student services, plant operation, general expense, administration?

9. Should general support of student aid be reduced? Should all student aid expenditures be limited to such income as is specifically earmarked for student financial assistance?

10. Should each instructional college be given the objective of balancing its income and expenditure, and, if so, within what reasonable period of time should an objective be realized?

Finally, it was apparent that issues of income and expenditure could only be considered within the kind of overall context of objectives and programs. For this reason, it was essential to ask:

1. What are the qualitative and quantitative objectives of Major University in terms of instruction, enrollment, research, public service, auxiliary service, and student aid?

2. What are the objectives of the university in promoting access to instructional programs and in seeking placement of graduates?

3. What are the objectives of the university in terms of its relationships to the urban community where it is located, to the state, to the nation, to international cooperation?

4. What are the objectives of the university in terms of its obligations to the faculty, to students, and to the professions concerned with university activities?

5. What are the objectives of the university in the utilization of its resources of personnel, facilities, endowment, and good will?

THE SOLUTION

Each of the questions raised under the heading of "Issues" must be answered. How would you, as president, answer them?

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